Fourth Meeting of the NOAA Science Advisory Board's Environmental Information Services Working Group (EISWG)

Silver Spring, Maryland

April 19-20, 2011

MINUTES

The fourth meeting of the SAB EISWG was held April 19-20, 2011, at Courtyard Marriott in Silver Spring, Maryland. Co-Chairs, Walter Dabberdt and Nancy Colleton, led the discussions.

Meeting attendees included:

EISWG Members:

- Philip Ardanuy, Raytheon
- Helen Brohl, Department of Transportation, U.S. Committee on the Marine Transportation System
- Nancy Colleton, Institute for Global Environmental Strategies (Co-Chair)
- Walter Dabberdt, Vaisala (Co-Chair)
- Eric Grimit, 3TIER
- Ronald McPherson, AMS
- Barry Myers, AccuWeather
- Peter Neilley, Weather Services International Corp,
- Warren Qualley, Harris Corporation
- Kelly Redmond, Desert Research Institute, Western Regional Climate Center
- Eugene Stallings, EASPE, Inc.
- Joel Widder, Oldaker, Belair and Wittie, LLP
- Julie Winkler, Michigan State University
- Robert Winokur, Office of the Oceanographer of the Navy

Other Participants:

- Raymond Ban, The Weather Channel (SAB Chair and Liaison)
- Cynthia Decker, NOAA (Executive Director, Science Advisory Board)
- Jack Hayes, NOAA NWS
- Edward Johnson, NOAA NWS
- Ronald C. Jones, NOAA NWS

- Jonathan Kelsey, NOAA
- Mary Kicza, NOAA Satellite and Information Service
- Jennifer Sprague, NOAA NWS
- Chris Strager, NOAA NWS, Eastern Region
- RADM David Titley, Oceanographer and Navigator of the U.S. Navy; Director, Task Force Climate Change
- Zdenka Willis, NOAA IOOS

The agenda for the two-day meeting is included in *Appendix A*. Actions are included in *Appendix B*. Presentations are available at noaa.gov. *Attachment C* includes a list of EIWSG Meetings.

Colleton and Dabberdt opened the meeting by thanking Phil Ardanuy for organizing the special AWIPS-2 demonstration for EISWG members, which was held on Monday, April 18th, 3:00—4:00 p.m. at Raytheon (3201 Colesville Road, Suite 800, Silver Spring, Maryland.. All who participated were grateful for the opportunity.

SAB Update

The brief opening statements and introductions were followed by remarks by SAB Chair and EISWG SAB Liaison, Ray Ban. Ban reported that over the past few months that the SAB has been examining the Working Groups' operations and looking at ways they may be more efficient and effective. He noted that Cynthia Decker, SAB Executive Director, was working on a Concept of Operations document that will be forwarded to the EISWG members for comment.

Action: Review the SAB's draft Concept of Operations document.

Climate Partnership Task Force (CPTF)

Related to this examination was the agreement by the SAB to establish a Climate Partnership Task Force (CPTF), which would be a joint effort of the EISWG and the Climate Working Group (CWG). Warren Qualley, the CPTF Co-Chair along with John Dutton of Penn State (representing the CWG) reported that this Task Force is intended to be an intense, short-term activity to draw upon experts in the field to address:

- 1. Proposing a vision and a model for how NOAA climate services could interact with industry.
- 2. Identifying potential private sector contributions to creating effective partnerships for providing the nation with effective and efficient climate services.
- 3. Identifying possible mechanisms through which the private sector might engage with the development and implementation of new approaches to NOAA climate services.
- 4. Compiling a starter list of US companies providing climate observations, products, and services.

5. Identifying the lessons learned from private section engagement on the weather time scale that would apply to climate and identify ways in the approach for climate should be different from that for weather?

The schedule for this effort is to convene a meeting of the Task Force in early June and produce an informational presentation for the July SAB Meeting. A final report would be submitted to the SAB in the fall timeframe.

Partnership Policy

Ed Johnson of NOAA provided an overview of the NOAA Partnership Policy and discussed how the EISWG might evaluate its effectiveness. It was noted during the discussion that the need exists to better communicate the policy across the NWS as well as all of NOAA.

The EISWG Co-Chairs took the action to determine a way forward to evaluate the Partnership Policy. It was also noted that Partnership Policy be part of the EISWG-AMS workshop being planned for August.

Action: EISWG will review the NOAA Partnership Policy and its implementation by various NOAA Line Offices.

Rapidly Changing Technologies

Ronald Jones, Chief Information Officer Staff, NOAA, provided a briefing to the EISWG on how the NWS incorporates new technologies. As noted by Jones, the new technologies are key to attracting new, young talent to NOAA. These new communication or social media technologies also present several challenges:

- Many service providers such as "doodle" services are located outside the United States;
- As discussed in the media, Twitter accounts have been hacked regularly raising security concerns; and
- Many peer-to-peer technologies are vulnerable to security issues.

Jones noted that one of the main challenges to NOAA—in addition to where to invest—is determining what to terminate. The current termination policy applies to methods and not just services. This is one area that the EISWG could examine and provide a recommendation.

Other key points of the discussion included:

- Does NOAA have a long-term technology strategy, which would address its use of Facebook in five years?
- Do services such as Facebook and Twitter compete with AccuWeather and The Weather Channel?
- How can NOAA exploit these technologies and still ensure its priority as providing warnings as opposed to communications?

Action: EISWG to continue consideration of information service options and challenges.

Open Weather and Climate Services Concept

As a follow up to discussions started at the November 2010 meeting, Peter Neilley provided a presentation on the Open Weather and Climate Services Concept. Phil Ardanuy and Eric Grimit collaborated with Neilley on the concept and its presentation.

The purpose of this presentation was to 1) endorse the basic concept; and 2) work collectively to determine specifics.

The paradigm for this concept is that any party that wants high resolution data can have it, and that the NWS should promote closer involvement of the private and academic sectors in its development activities.

The path forward would include defining an incremental policy or prototype; target shortterm actions; seek better interactions with developers; and address the challenges identified.

Ban noted that the proposed concept could enhance the value proposition to the public. Therefore, public investment in weather services will have a greater return.

To further this concept, the EISWG members agree to several actions:

Action: Neilley et al to develop and circulate a new draft based on the EIWSG's

comments by May 1st.

Action: EISWG to comment on the draft by May 15th

Action: Neilley to update the draft by June 1^{st} .

Action: Finalize the draft and slides by July 1^{st}

Action: Finalize the Open Weather and Climate Services prospectus and present it at the

AMS Summer (2011) Community Meeting.

Action: Discuss further at the EISWG-AMS Summer Community Workshop planned for August 10th in Boulder, Colorado, and the following EISWG summer meeting.

The group noted that making more information available has historically had a much success.

Summer Workshop Approach

EISWG discussed plans for hosting its first-ever community workshop on August 10th in conjunction with the AMS 2011 Summer Community Meeting in Boulder, CO. Topics will include the NOAA Partnership Policy, the NWS Roadmap documents, and the EISWG prospectus "Towards Open Weather and Climate Services." (The workshop agenda is available at http://goo.gl/7bJdR).

NWS Update

Dr. Jack Hayes, NWS Director, briefed the EISWG on a number of issues, including:

- Seasonal-to-interannual prediction
- FY12 and FY13 budget outlook
- NOAA's proposed Climate Service
- Polar satellite budgetary problems

NWS Roadmaps

Christopher Strager, NWS Eastern Region Director, briefed the EISWG on the status of NWS' Roadmap implementation documents, which he is overseeing. There are four such documents, covering: science and technology; services; workforce; and administration. EISWG will be asked to review the documents prior to their implementation.

National Environmental and Information Service

Dr. Mary Kicza, NESDIS Director, briefed the EISWG on challenges facing NESDIS with the Joint Polar Satellite System (JPSS). JPSS has a serious budget shortfall that will delay launches until at least 2017. In the meantime, polar orbiting satellite coverage will be provided by DoD (early morning orbit), EUMETSAT (mid-morning orbit), and NESDIS (afternoon orbit). The NPP (NPOES Preparatory Program) satellite launch is scheduled for October 2011. In addition, the GOES-R geostationary satellite program is being stretched out because of budget difficulties. NESDIS is exploring options that "pool" JPSS and GOES-R plans and resources.

Environmental Information and National Security

Dr. RADM David Titley, Oceanographer and Navigator of the Navy, made a presentation on the climate challenges facing the USN. These include; thinning of the Arctic sea ice, changing sea routes, redistribution of global fisheries, etc. Beginning in FY12, DoD will initiate a "re-capitalization" of its approach to global atmospheric prediction and will collaborate with NOAA to run a common modeling system.

Integrated Ocean Observing

Dr. Zdenka Willis, Director of the Integrated Ocean Observing System, briefed EISWG on IOOS, which has both global and coastal (regional) components. NOAA's Office of Oceanic and Atmospheric Research runs the global program while coastal observations are the responsibility of 17 federal agencies and 11 regional associations. The latter are 501C(3) organizations. No private sector organizations participate in IOOS. The regional associations may be an interesting approach to multi-party collaborations in other areas (e.g. the emerging nationwide network of networks program).

Fourth Meeting of the EISWG

Courtyard Marriott, Silver Spring Silver Spring Marriott April 19-20, 2011

Tuesday, April 19, 2011

8:30—9:00 Introductory Remarks

EISWG Co-Chairs: Nancy Colleton, President, Institute for Global Environmental Strategies; Executive Director, Alliance for Earth Observations; and Walt Dabberdt, Director for Strategic Research & Chief Science Officer, Vaisala

9:00—9:30 SAB Update

Ray Ban, Chair, NOAA Science Advisory Board; and Executive Vice President, Meteorology Science and Strategy, The Weather Channel

9:30-10:30 EISWG-CWG Climate Partnership Task Force

Ray Ban and Warren Qualley, Task Force Co-Chair, and Senior Weather Expert, Harris

10:30-11:00 Break

11:00-12:00 Partnership Policy

Ed Johnson, Director, Office of Strategic Planning and Policy, National Weather Service, NOAA

12:00-1:00 Working Lunch

1:00-2:00 Rapidly Changing Technologies

Ronald C. Jones, Chief Information Officer Staff, National Weather Service, NOAA

2:00-3:00 Open Weather Service Concept

Peter Neilley, Vice President for Forecasting Operations, Research and Development, Weather Services International; and Phil Ardanuy, Director, Remote Sensing Applications, Raytheon

- 3:00-3:30 Break
- 3:30-4:00 Summer Workshop Approach

Co-Chairs Colleton & Dabberdt

- 4:00-4:30 Review Actions/Work Plan
- 6:00 Group Dinner

Wednesday April 20, 2011

8:30-9:00 Introductory Remarks

Co-Chairs Colleton & Dabberdt

9:00-10:00 Remarks, NWS

Jack Hayes, Assistant Administrator, Weather Services; Director, National Weather Service, NOAA

10:00-11:00 NWS Roadmaps

Chris Strager, Director, Eastern Region, National Weather Service, NOAA

11:00-12:00 **NESDIS** Overview

Mary Kicza, Assistant Administrator, Satellite and Information Service, NOAA

12:00-1:00 Working Lunch

1:00-2:00 Environmental Information & National Security

RADM David Titley, Oceanographer and Navigator of the US Navy; Director, Task Force Climate Change

2:00-3:00 Integrated Ocean Observations

Zdenka Willis, Director, Integrated Oceans Observing System, NOAA

3:00-3:30 Break

3:30-4:00 EISWG Housekeeping

4:00 Adjourn

EISWG Actions Working Group Meeting April 20, 2011

Cynthia Decker to forward draft Concept of Operations document to the EISWG for review.

EISWG will review the NOAA Partnership Policy and its implementation by various NOAA Line Offices.

EISWG to continue consideration of information service options and challenges.

EISWG to review and subsequently approve the final CPTF summary presentation prior to its being submitted to the SAB for its July 2011 meeting.

Finalize the Open Weather and Climate Services prospectus and present it at the AMS Summer (2011) Community Meeting.

Attachment C

EISWG Schedule of Meetings

Meeting	Date	Location
6	November 16-17, 2011	Washington, DC
5	August 11, 2011	Boulder, Colorado
4	April 19-20, 2011	Silver Spring, Maryland
3	November 3-4, 2010	Sausalito, California
Ad hoc	August 9, 2010	State College, Pennsylvania
2	April 19-20, 2010	Silver Spring, Maryland
1	November 18-20, 2009	Silver Spring, Maryland